## REMARKS

Claims 1, 2, 4-9, 16-17 and 19-33 are pending and under consideration in the aboveidentified application. Claims 3, 10-15 and 18 were previously cancelled and remain cancelled. In the Office Action of April 13, 2010, claims 1, 2, 4-9, 16-17 and 19-33 were rejected. With this Amendment, claim 4 is amended.

## I. Claim Objections

Claim 4 was objected to for various informalities.

With this amendment, claim 4 is amended taking into consideration the Examiner's suggestions. Accordingly, the Applicants respectfully request the withdrawal of this objection.

## II. 35 U.S.C. § 102 Anticipation and § 103 Obviousness Rejections of Claims

Claims 1, 2, 4-8, 16, 17, 19-23 and 27-33 were rejected under 35 U.S.C.  $\S$  102(e) as being anticipated by Fox (U.S. Patent No. 6,566,697).

Claims 9 and 24 were rejected under 35 U.S.C. § 103(a) as being obvious in view of Fox.

Claim 25 was rejected under 35 U.S.C. § 103(a) as being obvious in view of Fox and Fossum (U.S. Patent No. 6,624,456).

Claim 26 was rejected under 35 U.S.C. § 103(a) as being obvious in view of Fox and Applicant Admitted Prior Art ("AAPA").

In relevant part, each of the independent claims 1, 16, 27, 30, 32 and 33 recite a threshold channel potential for turning on a drain transistor and for turning on a transfer transistor that are both set to a value higher than a potential which depletes a photoelectric converting element.

This is clearly unlike Fox which fails to disclose or even suggest a threshold channel potential for turning on a drain transistor and for turning on a transfer transistor that are both set to a value higher than a potential which depletes a photoelectric converting element. Instead, Fox discloses the voltage to deplete a photodiode being proportional to the threshold value of a preset transistor threshold value. See, U.S. Pat. No. 6,566,697, Col. 7, 1. 43-59. This cannot fairly be viewed as a threshold channel potential for turning on a drain transistor and for turning on a transfer transistor are both set to a value higher than a potential which depletes a photoelectric converting element because Fox discloses a voltage to deplete a photodiode being

proportional to a threshold value of a preset transistor without disclosing anything pertaining to a channel potential of a drain transistor and a transfer transistor.

Fossum and AAPA do not disclose anything pertaining a threshold channel potential for turning on a drain transistor and for turning on a transfer transistor which are both set to a value higher than a potential which depletes a photoelectric converting element.

As the Applicant's specification teaches, by providing a threshold channel potential for turning on a drain transistor and for turning on a transfer transistor that are both set to a value higher than a potential which depletes a photoelectric converting element, a sensitive preferred image output is produced while exposure time and light noise is reduced. See, U.S. Pat. Pub. No. 2004/0130757, Para. [0129]-[0130]. Further, because the channel potentials are set to a value higher than the potential to deplete a photoelectric conversion element, the drain transistor changes state repeatedly during a non-exposure time which eliminates any difference in the output image between rows of pixels. See, See, U.S. Pat. Pub. No. 2004/0130757, Para. [0120]-[0125].

Therefore, because Fox, Fossum, AAPA and any possible combination of them fails to disclose or even fairly suggest every feature of claims 1, 16, 27, 30, 32 and 33, the rejection of claims 1, 16, 27, 30, 32 and 33 cannot stand. Because claims 2, 4-9, 17 and 19-26, 31 depend, either directly or indirectly, from claims 1, 16, 27, 30, 32 and 33, they are allowable for at least the same reasons.

## III. Conclusion

In view of the above amendments and remarks, Applicant submits that the claims are clearly allowable over the cited prior art, and respectfully requests early and favorable notification to that effect.

Respectfully submitted,

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